state wide aluminum

64121

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DEC 27 1988
SUPERFUND PROGRAM
MANAGEMENT BRANCH

December 23, 1988

Ms. Susan Swales (5HS-11)
Waste Management Division
U.S. EPA - Region V
230 South Dearborn Street
Chicago, Illinois 60604

Dear Ms. Swales:

In reponse to your request that State Wide Aluminum sumit all the information relating to the following companies: Himco Waste Away & Himco, Inc, enclosed please find all documents and answers.

State Wide Aluminum as a manufacturing firm produce aluminum doors and windows for truck caps, vans & recreational vehicles. Aluminum is recieved, cut, notched & formed to desired sizes, in which glass, rubber, vinyl, screen and fasteners are assembled and attached to the frame. Wastes that are generated by these operations are: aluminum, aluminum dust, hydraulic fluids, lubricants, rubber, glass, vinyl, screen, steel dubris (rivit shanks, screws, bandings), acrylic, cardboards, empty cans of metal degreaser, silicone, paint, oil woods (see attached list).

Clean aluminum and scrap go into one trash bin. Dirty aluminum, aluminum dust, rivets, screws go into a different trash bin. This aluminum is sent to be recycled. Rubber, glass, vinyl, screen, acrylic, cardboard, empty cans of metal degreaser, silicone, paint and oil, and wood is put in trash bin that Himco disposes of. Hydraulic fluids and lubricants are put in container to be recycled.

Sincerely;

Georges Aboukhaled
Plant Engineer

enclosures

GA/mah

State Wide Aluminum • P.O. Box 987 • Elkhart, Indiana 46515-0987 • 219 262-2594

SPECIALISTS IN TRUCK COVER & VAN COMPONENTS

MATERIAL SAFETY DATA SHEET

Date	Revision Date	MSDS#
4-15-86		0

I. MATERIAL IDENTIFICATION

Manufacturer Name: Custom Extrusions Div.
Ohio Valley Alum. Co., Inc.
Address: P. O. Box 286
Connersville, IN 47331

Phone: (317) 825-1141

Alloy Code: 6000 Series

Material Name: Scrap
Aluminum Extrusions - Painted
Aluminum Extrusions - Painted & Thermal Filled

II. INGREDIENTS

Ingredient	Percent	TLV Gas ppm	TLV Fume mg/m'	TLV Dust	CAS Numbers
Aluminum	>95			10	7429-9-5
Contains no additional alloys above 1%					
Paint	< 1		Unknown		not classified
Polyurethane Polymer	< 5		Unknown		not classified

III. PHYSICAL DATA

'lting Point: Aluminum 1051 - 1025°F
Ployurethane 350 - 400°F
Paint-Unknown

VAPOR DENSITY: Unknown
PERCENT VOLATIL BY VOLUME: Unknown
EVAPORATION RATE: Unknown

Appearance: Color may vary with color of paint specified

IV. FIRE AND EXPLOSION HAZARD DATA

Flash Point: Aluminum : Unknown
Polyurethane: Unknown
Paint: Unknown

Extinguishing Media: Use extinguishing agent appropriate for the combustible material in area. Dry chemical or CO' recommended. Fire fighters should wear self-contained breathing apparatus and protective clothing.

Unusual Fire and Explosion Hazard: Molten aluminum, in the presence of water, is very unstable. Do not use water where there is a possibility of molten aluminum being present.

See Section IX for hazard decomposition products of paint and polyurethane.

V. HEALTH HAZARD DATE

TLV: See Section II

Primary Routes of Entry: Inhalation of Dust or Fumes

Under normal handling and use, exposure to the massive forms of Painted Aluminum Extrusion and/or Painted-Polyurethane Filled Aluminum Extrusions present few health hazards in themselves.

Inhalation of Finely divided aluminum powder may cause pulmonary fibrosis. Over-exposure to dusts and fumes may cause skin, nose and eye irritation and lung changes in workers, potentially leading to pulmonary diseases.

See Section IX regarding conditions to avoid when processing Painted Aluminum Extrusions and/or Painted-Polyurethane Filled Aluminum Extrusions.

Emergency and First Aid Procedures: Eye Contact: wash with large volume of water for 15 minutes. If irritation persists seek medical attention. Skin Contact: wash with soap and water. Inhalation: remove to fresh air and initiate appropriate support. Consult a physician.
Ingestion: very unlikely.

VI. REACTIVITY DATA

Satiability: Stable

Conditions to Avoid: See Section IX

Material to Avoid: Aluminum fines, painted surfaces and polyurethane polymer may be attached by strong acids and alkalies and by some halogenated organic compounds especially at elevated temperatures. Operations generation aluminum fines may produce hydrogen gas when exposed to moisture. See MFPA guidelines #491 for specific incompatible materials.

Hazardous Decomposition Products
Aluminum: None

PAINT: (May produce hazardous fumes when heated to decomposition as in welding). Fumes may contain: Carbon Monoxide, Oxides of Nitrogen, Acrylonitrile.
POLYURETHANE POLYMER: (May produce hazardous fumes when heated to decomposition, as in welding). Fumes may contain: Carbon Monoxide, Oxides of Nitrogen and traces of Hydrogen Cyanide.

Steps to be Taken in Case Material is Released or Spilled: No Special Procedures

Waste Disposal Method: For disposal of this material as a waste, act in accordance with all applicable federal, State and Local waste management regulations.
Recycling of aluminum scrap is encouraged by the industry.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: If TLV's exceeded use NIOSH approved dust or fumes respirator depending on contaminants and concentration present.

Ventilating: Local exhaust if TLV's exceeded.

Protective Gloves: Recommended while handling Aluminum Extrusions Painted and/or Aluminum Extrusions Painted and Thermal Filled.

Eye Protection: Eyeglasses or goggles depending on prevailing hazard.

Other Protective Equipment: None

IX. SPECIAL PRECAUTIONS

Precautions to be taken handling and storing: None under normal conditions of use and storage.

Other Precautions:

DO NOT WELD OR FLAME CUT Aluminum Extrusions Painted and/or Aluminum Extrusions Painted and Thermal Filled. Welding or open flame will cause decomposition of the paint and/or polyurethane with the release of hazardous fumes, see Section VI.

Information herein is given in good faith as authoriative and valid: however, no warranty, express or implied, can be made.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or arising our of or in any way connected with the handling, storage, use or disposal of the product.

Signature of Preparer Robert Miller

Title Vice-President

Date April 1, 1986

MATERIAL SAFETY DATA SHEET

Date	Revision Date	MSDS
4-15-86		0

I. MATERIAL IDENTIFICATION

Manufacturers Name: Custom Extrusions Div.
Ohio Valley Alum. Co., Inc.
P. O. Box 286
Connersville, IN 47331

Phone: (317) 825-1141

Material Name: Aluminum sawchips

II. INGREDIENTS

	CAS Number	%		OSHA 8-hr TWA	ACGIH 8-hr TWA (1984-85)	ACGIH STEL (1984-85)
Aluminum	(7429-90-S)	>70	(Dust)	--	10 mg/m'	20 mg/m'
			(Fume)	--	5 mg/m'	--
Copper	(7440-50-8)	≤ .40	(Dust)	1 mg/m'	1 mg/m'	2 mg/m'
			(Fume)	0.1 mg/m'	0.2 mg/m'	--
Magnesium	(1309-48-4)	≤ 1.2		15 mg/m' (as magnesium oxide fume)	10 mg/m'	--
Zinc	(1314-13-2)	< .25	(Dust)	--	(2)	--
			(Fume)	5 mg/m'	5 mg/m'	10 mg/m'
Chromium	(7440-47-3)	< 1		1 mg/m'	0.5 mg/m'	--

Note: Chromium has been identified as potential human carciogens. See Section VI, Health Hazard Data.

III. PHYSICAL DATA

Melting Point: 210 - 670° C
Specific Gravity: 2.53 - 2.95
Boiling Point (aluminum): 2430° C

Vapor Pressure: 1 mm HG @1284° (of aluminum)
Solubility in water: insoluble

Appearance: Dull Silver Metallic Color

IV. FIRE AND EXPLOSION DATA

Flash Point: Information not available.

Flammability Limits: Information not available.

Autoignition Temperature (of solid aluminum in oxygen): 1832°F

Solid, massive form of material is not combustible under ordinary fire conditions. Fire and explosion hazards are moderate when material is in the form of dust and exposed to heat or flames, chemical reaction, or contact with powerful oxidizers. Fires have been reported in piles of fine scrap, possibly due to contamination from oil or other materials which support combustion. However, finely divided aluminum sawchips in itself present a moderate fire hazard. Magnesium burns violently in air and may react vigorously with oxidizers. Molten aluminum alloys present a serious explosion hazard when exposed to moisture. Contact with moisture of any kind must be avoided.

Fire Extinguishing Methods: Use special mixtures of dry chemicals. Do not use water or moist sand. Fire fighters should wear self-contained breathing apparatus and protective clothing.

V. REACTIVITY DATA

Massive material is stable at ordinary temperatures, but dust presents moderate fire and explosion hazards. Material may be incompatible with acids, bases, and oxidizers. Molten scrap metal may react violently with water. For additional information, users should consult data sheets on individual component elements

VI. HEALTH HAZARD DATA

TLV: See Section II.
Primary Routes of Entry: Inhalation of dust or fume.

Under normal handling and use, exposure to the massive form of aluminum sawchips presents few health hazards in itself. Melting of scrap may produce fumes containing the component elements, and breathing these fumes may present potentially significant health hazards, The exposure levels in Section II are relevant to fumes and dusts. Special precautions should be taken if chips are contaminated; see Section IX.

Inhalation of finely divided aluminum powder may cause pulmonary fibrosis. Overexposure to dusts and especially fumes containing component elements of aluminum alloys may cause skin, nose, mouth and eye irritation and lung changes in workers, potentially leading to pulmonary fibrosis.

VII. SPILL PROCEDURES

No special precautions are necessary for spills of bulk material. If large quantities of dust are spilled, remove by vacuuming or wet sweeping to prevent heavy concentrations of airborne dust. Clean-up personnel should wear respirators and protective clothing.

VIII. SPECIAL PROTECTION INFORMATION

Use general and local exhaust ventilation to keep airborne concentrate of dust or fumes below the TLV. Employees should wear MSHA or NIOSH approved respirators for protection against airborne dust and fumes. Full protective clothing should be worn by workers exposed to heavy concentrations fo dust, and showering should be required before changing into street clothes. Gloves and barrier creams may be necessary to prevent skin sensitization and dermatitis.

Approved safety glasses or goggles should be worn when working with dusty material. Safety eyewash stations should be provided in close proximity to work areas.

Pre-employment and periodic medical evaluations should be provided. Attention should be directed toward skin, eyes, respiratory tract, blood, kidneys, pulmonary function, and neurologic health. Chest X-rays should be included if symptoms are present.

Food should not be consumed in the work area.

IX. SPECIAL PRECAUTIONS

Use good housekeeping practices to prevent accumulations of dust and to keep airborne dust concentrations at a minimum. Avoid breathing dust or fumes.

Store material away from incompatible materials, and keep dust away from sources of ignition.

Follow recommendations in Section V concerning aluminum dross and moisture.

Information herein is given in good faith as authoritative and valid: However, no warranty, express or implied, can be made.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out or in any way connected with the handling, storage, use or disposal of the product.

Signature of Preparer Robert Mullin

Title Vice President

Date April 01, 1986

Rocco

Kollen Williams

ACR-LL

85

MATERIAL SAFETY DATA SHEET
FOR COATINGS, RESINS AND RELATED MATERIALS
(Approved by U.S. Department of Labor 'Essentially Similar' to form OSHA-20)

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, Ohio 44115

EMERGENCY TELEPHONE NO.
(216) 566-2917

DATE OF PREPARATION
6-May-85

INFORMATION TELEPHONE NO.
(216) 566-2902

Section I -- PRODUCT IDENTIFICATION

PRODUCT NAME
ACRYLYD* Acrylic Enamel, Lead Colors
PRODUCT NUMBERS AND COLORS
F8, F10, F11, J5, JX, 35-Series
PRODUCT CLASS
Acrylic Enamel

Section II -- HAZARDOUS INGREDIENTS

CAS No.	INGREDIENT	PERCENT	TLV-PPM	TLV-MG/M3	LEL	V.P.
64742-47-8	Mineral Spirits.	<5	100.	581.	1.0	2.0
108-88-3	Toluene.	1-10	100.	375.	1.0	22.0
100-41-4	Ethylbenzene	<5	100.	435.	1.0	7.1
1330-20-7	Xylene.	30-40	100.	435.	1.0	5.9
64742-95-6	Light Aromatic Naphtha	1-10	100.	462.	0.7	3.8
112-07-2	2-Butoxyethyl Acetate.	<5	50.	330.	0.5	1.0
123-86-4	n-Butyl Acetate.	0-5	150.	710.	1.3	10.0
1344-37-2	Lead Chromate.	<15		0.05		
12656-85-8	Molybdate Orange.			0.05		
	Lead (as Pb)	0.3-11.0		0.05		
	Chromium VI (as Cr)	0.0-2.5		0.05		

Section III -- PHYSICAL DATA

EVAPORATION RATE -- Slower than Ether
VAPOR DENSITY -- Heavier than Air

BOILING RANGE (F)	% VOLATILE VOLUME	WT/GAL
222 - 384	55-65	8.0-9.0

Section IV -- FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION FLASH POINT 50 F PMCC LEL 0.5
RED LABEL -- Flammable, Flash below 100 F
EXTINGUISHING MEDIA
Carbon Dioxide, Dry Chemical, Foam
UNUSUAL FIRE AND EXPLOSION HAZARDS
Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
SPECIAL FIRE FIGHTING PROCEDURES
Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

Continued on page 2

Section V -- HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE -- See Section II

EFFECTS OF OVEREXPOSURE

ACUTE: In a confined area vapors in high concentration are anesthetic. Overexposure may result in lightheadedness and staggering gait.
Irritant to skin and upper respiratory system.

CHRONIC: Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.
Repeated and prolonged exposure to spray mist may cause perforation of nasal septum and ulcers of the skin.

EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water.
Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes.
Get medical attention.

Section VI -- REACTIVITY DATA

STABILITY -- Stable

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide, Oxides of Metals in Section II

HAZARDOUS POLYMERIZATION -- Will Not Occur

Section VII -- SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate and remove with inert absorbent.

WASTE DISPOSAL METHOD

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

Section VIII -- PROTECTION INFORMATION

PRECAUTIONS TO BE TAKEN IN USE

Before initial use, consult OSHA's Standard for Occupational Exposure to Lead (29 CFR 1910.1025).

Use only with adequate ventilation. Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

Protect against hazardous dust or fumes which may be generated by sanding, wirebrushing, abrading, burning, brazing or welding of the dried film.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section II is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear respiratory device approved by NIOSH/MSHA for protection against materials in Section II.

PROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section II.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

Continued on page 3

Section IX -- PRECAUTIONS

DOL STORAGE CATEGORY -- 1B

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

OTHER PRECAUTIONS

This coating contains materials classified as nuisance particulates, for example titanium dioxide, calcium carbonate, etc. (see ACGIH TLV List, Preface and Appendix D), which may be present at hazardous levels only during sanding or abrading of the dried film.

CONTAINS LEAD. Do not apply on toys and other children's articles, furniture, or any interior surface of a dwelling or facility which may be occupied or used by children. Do not apply on any exterior surface of dwelling units, such as window sills, porches, stairs, or railings to which children may be commonly exposed.

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

This Material Safety Data Sheet conforms to the Hazard Communication standard, 29 CFR 1910.1200(g)(4), for similar complex mixtures.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

GLT INC

GENERAL ELECTRIC COMPANY
SILICONE PRODUCTS DIVISION
WATERFORD, NY 12188

OCTOBER, 1985

G L T INC
1090 BLOOMINGDALE

BRISTOL IN 46507

DEAR CUSTOMER:

ENCLOSED ARE MATERIAL SAFETY DATA SHEETS FOR PRODUCTS PURCHASED FROM US WITHIN THE PAST YEAR. COMMUNICATION OF PHYSICAL PROPERTY, HEALTH AND SAFETY INFORMATION IN MATERIAL SAFETY DATA SHEETS (MSDS) IS A KEY ELEMENT IN OUR PRODUCT SAFETY PROGRAM. WITH THIS INFORMATION, YOU CAN BETTER FULFILL YOUR OBLICATION TO EDUCATE EXPOSED PERSONNEL IN THEIR WORKPLACE. WE SHALL CONTINUE TO SEND NEW MSDS'S AUTOMATICALLY EACH TIME YOU ORDER A PRODUCT WHICH YOU HAVE NOT ORDERED BEFORE AND EACH TIME AN EXISTING MSDS IS UPDATED. REFERENCE WORKS OR PERSONNEL WHO ARE EXPERT ON VENTILATION, TOXICOLOGY AND FIRE PREVENTION MAY HAVE TO BE CONSULTED TO ADEQUATELY UTILIZE THE DATA CONTAINED IN MSDS'S.

THE ENCLOSED MSDS'S HAVE BEEN REDESIGNED AND REVISED TO MEET THE REQUIREMENTS OF OSHA'S FEDERAL HAZARD COMMUNICATION STANDARD WHICH BECOMES EFFECTIVE NOVEMTER 25, 1985. IN ADDITION TO YOUR OWN PERSONAL NEEDS, WOULD YOU KINDLY FORWARD THE MSDS(S) OR A COPY THEREOF, TO THE SUPERVISOR OR MANAGER RESPONSIBLE FOR ADMINISTERING THE OSHA HAZARD COMMUNICATION STANDARD FOR YOUR COMPANY.

IF YOU HAVE ANY QUESTIONS, REQUIRE ADDITIONAL INFORMATION NOT CONTAINED IN THE MSDS OR REQUIRE ADDITIONAL MSDS'S, CONTACT YOUR GENERAL ELECTRIC SALES OR CUSTOMER SERVICE REPRESENTATIVE.

WE APPRECIATE YOUR BUSINESS AND WE WILL CONTINUE TO MAINTAIN THE HIGHEST QUALITY OF PRODUCTS AND SERVICE TO YOU, OUR VALUED CUSTOMER.

COPYRIGHT GENERAL ELECTRIC CO. 1985

MATERIAL SAFETY DATA SHEET

MANUFACTURED BY:
GENERAL ELECTRIC CO.
SILICONE PRODUCTS DIV.
WATERFORD, NY 12188

EMERGENCY TELEPHONE(24 HRS)
(518) 237-3330
REVISED: 10/21/85
PREPARER:DA POLSINELLI

***** I PRODUCT IDENTIFICATION *****

PRODUCT IDENTIFICATION SM2155 CHEMICAL FAMILY:POLYSILOXANE
CHEMICAL NAME: AQUEOUS EMULSION FORMULA: MIXTURE

***** II PRODUCT COMPONENTS *****

PRODUCT COMPOSITION	APPROX. %	ACGIH TLV	OSHA PEL	UNITS	CAS REG NO.
A. HAZARDOUS					
ALKYL ARYL ETHER(4.5)	< 05%	NF	NF	NA	9036-19-5
ALKYL ARYL ETHER(20)	< 05%	NF	NF	NA	26027-38-3
B. NON-HAZARDOUS					
**PRODUCT INFORMATION	NA	NA	NA	NA	NA

***** III PHYSICAL DATA ******

**PRODUCT INFORMATION
BOILING POINT 212 (F) 100 (C)
PHYSICAL STATE LIQUID
VAPOR PRESSURE (20 C) NA MM HG
ODOR ODORLESS
VAPOR DENSITY (AIR=1) NA
COLOR WHITE
SOLUBILITY IN WATER (20 C) EMULSION PH 4-8
SOLUBILITY IN ORGANIC SOLVENT ACIDITY/ALKALINITY UNKN MEG/G
(STATE SOLVENT)SOLUBLE IN ALCOHOLS
FREEZING POINT 32 (F) 0 (C) DENSITY 982.5 KG/M3
MELTING POINT 32 (F) 0 (C) SPECIFIC GRAVITY(WATER=1) 1.00
% VOLATILE BY VOLUME ~50 EVAPORATION RATE (BUTYL ACETATE=1) <1

***** IV FIRE AND EXPLOSION DATA *****

FLASH POINT NONE (F) NONE (C) BY PMCC. IGNITION TEMP NA (F)NA (C)
FLAMMABLE LIMITS IN AIR(%): LOWER NA UPPER NA
EXTINGUISHING MEDIA:
ALL STANDARD FIREFIGHTING MEDIA
SPECIAL FIREFIGHTING PROCEDURES:
NONE KNOWN.

***** V REACTIVITY DATA *****

STABILITY:
X STABLE UNSTABLE
HAZARDOUS:
POLYMERIZATION WILL NOT OCCUR
HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON DIOXIDE.
SILICON DIOXIDE.
INCOMPATIBILITY (MATERIALS TO AVOID):

NONE KNOWN.
CONDITIONS TO AVOID:
NONE KNOWN.

***** VI HEALTH HAZARD DATA *****

ACUTE SIGNS/EFFECTS OF OVEREXPOSURE:
INGESTION:
NONE KNOWN
SKIN CONTACT:
MAY CAUSE MILD SKIN IRRITATION.
INHALATION:
NONE KNOWN.
EYE CONTACT:
MAY IRRITATE EYES.
MEDICAL CONDITIONS AGGRAVATED:
NONE KNOWN.
OTHER:
NONE KNOWN.
CHRONIC EFFECTS OF OVEREXPOSURE:
NONE KNOWN.

EMERGENCY AND FIRST AID PROCEDURES:
INGESTION:
NONE KNOWN.
SKIN:
WASH WITH SOAP AND WATER.
INHALATION:
NONE KNOWN.
EYES:
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION IF IRRITATION PERSISTS.
NOTE TO PHYSICIAN:
NONE KNOWN.

TOXICITY:	ALKYL ARYL ETHER(4.5)	
ACUTE ORAL LD50	1800 (RAT)	MG/KG
ACUTE DERMAL LD50	70 INV,MUS.	MG/KG
ACUTE INHALATION LC50	NONE FOUND	

OTHER
NONE.
AMES TEST: UNKNOWN

TOXICITY:	ALKYL ARYL ETHER(20)	
ACUTE ORAL LD50	3600 (RAT)	MG/KG
ACUTE DERMAL LD50	NONE FOUND	MG/KG
ACUTE INHALATION LC50	NONE FOUND	

OTHER
NONE.
AMES TEST: UNKNOWN
PRINCIPAL ROUTES OF EXPOSURE:
EYES.
PRODUCTS/INGREDIENTS:
NONE KNOWN.

***** VII SPECIAL PROTECTIVE EQUIPMENT *****

RESPIRATORY PROTECTION:
NONE KNOWN.
PROTECTIVE GLOVES:
NONE KNOWN.
EYE AND FACE PROTECTION:
SAFETY GLASSES.
OTHER PROTECTIVE EQUIPMENT:
NONE KNOWN.
VENTILATION:
NONE KNOWN.

*** VIII SPILL, LEAK AND DISPOSAL PROCEDURES ***

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
WIPE OR SOAK UP IN AN INERT MATERIAL AND PUT IN A CONTAINER FOR DISPOSAL.
DISPOSAL METHOD:
DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

***** IX SPECIAL PRECAUTIONS *****

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
AVOID CONTACT WITH EYES.
ENGINEERING CONTROLS:
EYEWASH STATIONS.

** X SHIPPING AND REGULATORY CLASSIFICATION DATA **

DOT SHIPPING NAME: NONE UN/NA NUMBER: NONE
DOT HAZARD CLASS: NONE
DOT LABEL(S): NONE
EPA HAZARD WASTE: NONE
OSHA HAZARD CLASS: CONTAINS EYE IRRITANT
CPSC CLASSIFICATION: NONE
TRANSPORTATION CLASS: IMO NONE
RID (OCTI) NONE
ADR (ECE) NONE
RAR (IATA) NONE
NFPA/HMIS CLASSIFICATION: FLAMMABILITY 0 , REACTIVITY 0 , HEALTH 1
ADDITIONAL INFORMATION:
THESE DATA ARE OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS MADE. THE RECOMMENDED HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTENT OF THE INTENDED USE.

3M

Material Safety Data Sheet

Form 15593-E-PWO

3M
3M Center
St. Paul, Minnesota 55144
612/733 1110

Duns No.: 00-617-3082

Chemical Family

Trade Name: 3M Metal Degreaser 4987

3M I.D. Number: 62-4987-4930-8 AC&S Division

1. Ingredients

Ingredients	CAS #	%	TLV* (unit)
1,1,1-trichloroethane*	71-55-6	~ 41	350 ppm
Perchloroethylene	127-18-4	~ 41	50 ppm
Chlorodifluoromethane propellant	75-45-6	~ 18	1000 ppm

* May contain up to 2.4% diethylene ether

2. Physical Data

Boiling Point	Compressed gas	Solubility in Water	Very slight
Vapor Pressure	Compressed gas	Specific Gravity (H_2O = 1)	N.A.
Vapor Density (Air = 1)	~ 5	Percent Volatile	100
Evaporation Rate (ether = 1)	< 5	pH	N.A.

Appearance and Odor: Colorless liquid; sweet odor

3. Fire and Explosion Hazard Data

Flash Point (Test Method): N.A.

Flammable Limits: LEL = N.A. UEL = N.A.

Extinguishing Media: CO_2, foam, dry chemical

Special Fire Fighting Procedures: Treat as pressurized container.

Unusual Fire and Explosion Hazards: Treat as pressurized container.

4. Environmental Information

Spill Response

Observe all precautions from other sections. Collect, place in a U.S. Department of Transportation approved container and seal.

Recommended Disposal

Completely empty cans may be disposed in a sanitary landfill. Do not puncture or burn cans in household incinerator. Incinerate in an industrial or commercial facility that can handle aerosol cans safely. Combustion products will include hydrogen chloride and hydrogen fluoride. Since regulations vary, consult applicable regulations or authorities before disposal.

Threshold Limit Values listed above are current to 1985. Because they are reviewed yearly by ACGIH and subject to change (usually to a lower value) it is necessary for the user of this Material Safety Data Sheet to maintain a list of revised TLV's and update the sheet periodically.

5. Health Hazard Data

Eye Contact

Irritating to eyes upon direct contact.

Skin Contact

Prolonged skin contact may defat skin leading to irritation and dermatitis.

Inhalation

Concentrated vapor may produce anesthetic effects. Deliberate inhalation (misuse) may be harmful or fatal.

Ingestion

Suggested First Aid

Eye contact: Immediately flush eyes with plenty of water for at least 10 minutes and call a physician.
Skin contact: Wash with soap and water.
Inhalation: Provide fresh air.

6. Reactivity Data

Stability	☐ Unstable ☒ Stable	**Conditions to Avoid** Do not store above 120° F.
Incompatibility		**Materials to Avoid**
Hazardous Polymerization	☐ May Occur ☒ May Not Occur	**Conditions to Avoid**

Hazardous Decomposition Products

CO, CO_2, HCl and possible trace amounts of chlorene and phosgene when subjected to excessive heat or flame.

7. Special Protection Information

Eye Protection

Safety glasses

Skin Protection

Ventilation Local exhaust preferred. Mechanical for low usage.

Respiratory and Special Protection

As required.

Other Protection

8. Precautionary Information

Do not use in confined areas or areas with little or no air movement unless you employ means to circulate air and prevent vapor buildup. Avoid breathing vapor and overspray (airborne product particles). Avoid vapor contact with open flame, welding arcs or other high temperature sources which can cause vapor decomposition and harmful gases. Prevent contact with eyes and skin. Do not puncture or incinerate. Keep out of reach of children.

Issue Date	Supersedes
Jan., 1985	Dec., 1983

The information on this Data Sheet represents our current data and best opinion as to the proper use and handling of this product under normal conditions. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with any other product or any process is the responsibility of the user.

Material Safety Data Sheet
May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY *(As Used on Label and List)*
Acrylic Sealant 5555 All Colors

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name Schnee-Morehead, Inc.	Emergency Telephone Number 214 438-9111
Address *(Number, Street, City, State, and ZIP Code)* 111 North Nursery Rd., P.O. Box 1305	Telephone Number for Information 214 438-9111
Irving, Texas 75060	Date Prepared 5/9/86
	Signature of Preparer *(optional)* Rondale Watts

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*
Aromatic Hydrocarbon (Toluene)	200 ppm	100 ppm		26.9

Section III — Physical/Chemical Characteristics

Boiling Point	231°F	Specific Gravity (H_2O = 1)	1.274
Vapor Pressure (mm Hg.)	28	Melting Point	N/A
Vapor Density (AIR = 1)	3.2	Evaporation Rate (Butyl Acetate = 1)	1.9

Solubility in Water
500 ppm

Appearance and Odor
Bronze, Gray, or Off White - Aromatic Odor

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
40°F (4.4c)	In air % by volume	1.2	7

Extinguishing Media
Carbon dioxide, dry chemical, foam and water fog.

Special Fire Fighting Procedures
Fire fighters should wear self-contained breathing apparatus and eye protection.

Unusual Fire and Explosion Hazards
The solvent in this product is volatile and flammable.

..on V — Reactivity Data

..bility	Unstable		Conditions to Avoid
	Stable	X	Avoid heat or spark.

Incompatibility (*Materials to Avoid*)

..azardous Decomposition or Byproducts
May form toxic materials, carbon dioxide and carbon monoxide.

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	Yes	Not likely

Health Hazards (*Acute and Chronic*)
Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness. Excessive contact can cause irritation, drying of skin and edema.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?

Signs and Symptoms of Exposure
Believed to cause slight-to-moderate eye and skin irritation upon contact. Chronic effects of exposure may be-loss of appetite, nose bleeds and liver enlargement.

Medical Conditions
Generally Aggravated by Exposure N/A

Emergency and First Aid Procedures If on skin wash with soap and water. Inhalation: If affected, remove individual to fresh air. If breathing has stopped give artificial respiration and get medical attention. If in eyes flush with large amounts of water and get medical attention.

..ection VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
Protect from source of ignition. Ordinary clean-up-scrape or spatula up.

Waste Disposal Method
Dispose of product in accordance with applicable local, state, county and federal regulations.

Precautions to Be Taken in Handling and Storing
Keep away from heat, sources of ignition and oxidizing agents. No smoking in areas of use.

Other Precautions

Section VIII — Control Measures

Respiratory Protection (*Specify Type*)
If working in areas of poor ventilation, use cartridge or canister type respirator.

Ventilation	Local Exhaust	Special
Mechanical	Mechanical (*General*) Maintain exposure below P.E.L.	Other

Protective Gloves	Eye Protection
Neoprene gloves if needed.	Chemical goggles if splashing may occur.

Other Protective Clothing or Equipment

..k/Hygienic Practices
Observe general hygiene practices.

* USGPO: 1986-491-529/65775